

REMARKS/ARGUMENTS

The Office Action mailed April 22, 2004, has been received and reviewed. Claims 1 through 31, and 51 through 66 are currently pending in the application. Claims 17 through 31, and 51 through 66 are allowed. Claims 1 through 16 stand rejected. Reconsideration of the application is respectfully requested.

Information Disclosure Statement(s)

Applicant notes the filing of an Information Disclosure Statement herein on March 17, 2004, and notes that no copy of the PTO/SB/08 was returned with the outstanding Office Action. Applicant respectfully requests that the information cited on the PTO/SB/08 be made of record herein and an initialed copy of the PTO-1449 be returned to Applicant's undersigned attorney evidencing the same. A copy of the PTO-1449 and a date-stamped copy of the transmittal postcard evidencing receipt of the same by the Office are enclosed for the Examiner's reference.

35 U.S.C. § 102(b) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 5,286,426 to Rano, Jr. et al.

Claims 1, 2, 4, and 5 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Rano, Jr. et al. (U.S. Patent No. 5,286,426). Applicant respectfully traverses this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Rano discloses a method for assembling a lead frame between two plate-mold cavity plates. A pair of short guide pins 50 extends upwardly from the bottom cavity plate 20 for registration with two pilot holes 18 of the lead frame strip 10. Col. 3 lines 9-12. Cavities, 24, are spaced at intervals in a row in the bottom cavity plate 20. Col. 2 lines 63-64. The assembly

fixture also has a base plate 36 with two upwardly extending guide posts 38 and 40. The guide posts 38 and 40 extend through two holes 42 and 44 in the bottom cavity plate 20. Col 3 lines 1-6. The top cavity plate also has guide holes 66 that will be penetrated by guide posts 38 and 40. Col 3 lines 67-68.

Claim 1 recites:

An apparatus for facilitating processing of a plurality electronic component assemblies, comprising:

a first platen including a plurality of sets of *alignment elements projecting therefrom*, the sets of alignment elements configured and positioned for cooperatively engaging sets of alignment features of a like plurality of electronic component assemblies arranged in a plurality of mutually laterally spaced locations over the first platen; and
a second platen including a plurality of component cavities extending therethrough at a plurality of mutually laterally spaced locations corresponding to the locations over the first platen, the second platen further including a plurality of sets of *alignment element receptacles configured and positioned to respectively receive therein the plurality of sets of alignment elements* with the second platen superimposed on the first platen. (emphasis added)

Rano fails to disclose a first platen including a plurality of sets of alignment elements projecting therefrom and a second platen including a plurality of sets of alignment element receptacles configured and positioned to respectively receive therein the plurality of sets of alignment elements. Rather, Rano discloses a bottom cavity plate 20 including a pair of short guide pins 50 extending upwardly therefrom for registration with two pilot holes 18 of the lead frame strip 10. Guide pins 50 are not received by the top cavity plate 22. Rano additionally discloses *a base plate* 36 with two upwardly extending guide posts 38 and 40 which extend through two holes 42 and 44 in the bottom cavity plate 20. The top cavity plate also has guide holes 66 that will be penetrated by guide posts 38 and 40.

Spaced apart from lead frame strip regions, guide posts 38 and 40 are not configured to engage lead frame strip 10. (See FIG. 2) Accordingly, Rano fails to describe each and every element of claim 1. Therefore, it is respectfully submitted that the rejection to claim 1 should be withdrawn.

Claims 2, 4, and 5 are each allowable, among other reasons, as depending from claim 1 which should be allowed.

Claims 4 and 5 are additionally allowable because Rano fails to disclose component cavities divided into a plurality of subcavities separated by strut members.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,286,426 to Rano, Jr. et al., in View of U.S. Patent No. 5,985,185 to Steijer et al.

Claims 3 and 6 through 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rano, Jr. Et al. (U.S. Patent No. 5,286,426) in view of Steijer et al. (U.S. Patent No. 5,985,185). Applicant respectfully traverses this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The 35 U.S.C. § 103(a) obviousness rejections of claims 3 and 6-16 are improper because they fail to establish a *prima facie* case of obviousness.

The teachings of Rano have been summarized above.

Steijer et al. is directed to encapsulating optocomponents with a capsule of plastic or resin material using a mould assembly. As described, the mould assembly comprises a lower mould half 1 having a mould cavity 3 and an upper mould half 17 having a mould cavity 19 (Figs. 1 and 2). The mould assembly is configured to receive a lead frame 51, which rests on shoulders 71 of mould cavity 3 (col. 6, lines 3-16). Lower mould half 1 further includes fixed guide pins 73 that are placed in holes 75 of lead frame 51 in order to keep lead frame 51 in its correct position in mould cavity 3. Both lower mould half 1 and upper mould half 17 include positioning pins 85 and corresponding holes 87 for receiving positioning pins 85, the function of which is to place the two mould halves 1 and 17 in mutually correct positions during the moulding process (Figs. 1 and 2 and col. 7, lines 57-61).

It is respectfully submitted that Rano and Steijer, taken either alone or in combination, do not teach or suggest each and every element of independent claim 1 from which claims 3 and 6 through 16 depend. As set forth above, Applicants submit that Rano fails to teach or suggest all the limitations as set forth in independent claim 1. Steijer fails to teach or suggest a first platen including a plurality of sets of alignment elements projecting therefrom, the sets of alignment elements configured and positioned for cooperatively engaging sets of alignment features of a like plurality of electronic component assemblies, and a second platen including a plurality of component cavities extending therethrough, the second platen further including a plurality of sets of alignment element receptacles configured and positioned to respectively receive therein the plurality of sets of alignment elements as set forth in claim 1 of the present invention. Rather, Steijer teaches a lower mould half 1 including fixed guide pins 73 that are placed in holes 75 of lead frame 51. Fixed guide pins 73 are not received by the upper mould half 17. Lower mould half 1 and upper mould half 17 include positioning pins 85 and corresponding holes 87 for receiving positioning pins 85, however, positioning pins 85 and corresponding holes 87 are not configured for engaging alignment features of lead frame 51. Positioning pins 85 are located outside the position of the lead frame in mould cavity 3. (See FIG.1) Accordingly, Steijer fails to cure the deficiencies in Rano. Therefore, it is respectfully submitted that claim 1 is allowable over the combination of Rano and Steijer because the cited prior art fails to establish a *prima facie* case of obviousness because the cited prior art does not teach or suggest the claim

limitations of the claimed invention of claim 1.

Claims 3 and 6 through 16 are each allowable, among other reasons, as depending from claim 1 which should be allowed.

Claims 6, 8, 10-12, and 14 are each further allowable because neither Rano nor Steijer teach or suggest a component cavity divided into a plurality of subcavities separated by strut members.

CONCLUSION

Claims 1 through 31, and 51 through 66 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicant's undersigned attorney.

Respectfully submitted,



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Supplemental Information Disclosure Statement (2 pages); Check No.
5888 in the amount of \$180.00; and Form PTO/SB/08 (1 page), with copy
of cited references (4 documents)

Invention: METHODS AND APPARATUS FOR
STEREOLITHOGRAPHIC PROCESSING OF
COMPONENTS AND ASSEMBLIES

Applicant(s): Warren M. Farnworth
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